U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH THE WISCONSIN CROP REPORTING SERVICE
CLIMATOGRAPHY OF THE UNITED STATES NO. 20-47

LATITUDE 43°03'N
LONGITUDE 91°10'W
ELEV. (GROUND) 628 Feet

CLIMATOLOGICAL SUMMARY

MEANS AND EXTREMES FOR PERIOD--1930-1959

STATION:
PRAIRIE DU CHIEN, WISCONSIN

Month	Temperature (°F) Means: Daily maximum	Daily minimum	Monthly	Extremes: Record highest	Year	Record lowest	Year	** Mean degree days	Precipitation Totals (Inches): Mean	Greatest daily	Year	Snow, Sleet: Mean	Maximum monthly	Year	Greatest daily	Year	Mean number of days: Precip. .10 inch or more	Temperatures: Max. 90° and above	Max. 32° and below	Min. 32° and below	Min. 0° and below	Month
(a)	30	30	30	30		30		30	30	30		30	30		30		30	30	30	30	30	
Jan.	29.8	10.6	20.2	55	1944	-37	1951	1390	1.13	1.78	1946	8.7	20.5	1943	10.0	1949	4	0	17	30	8	Jan.
Feb.	33.5	13.7	23.6	65	1930	-29	1951	1160	1.02	1.46	1948	6.3	18.0	1936	7.0	1937	3	0	12	27	6	Feb.
Mar.	44.0	24.0	34.0	81	1939	-12	1948	960	2.08	1.49	1943	9.0	28.7	1951	10.0	1959+	5	0	5	25	1	Mar.
Apr.	60.8	37.6	49.2	90	1930	12	1936	470	2.75	1.63	1950+	0.9	7.5	1936	5.0	1938	6	*	*	10	*	Apr.
May	72.9	49.1	61.0	109	1934	26	1935	200	3.86	2.96	1932	0.1	2.0	1947	2.0	1947	8	1	0	1	0	May
June	81.8	59.1	70.5	105	1931	36	1945	50	5.04	3.53	1959	0	0		0		8	6	0	0	0	June
July	87.2	62.9	75.1	109	1936	45	1936	0	3.69	5.46	1940	0	0		0		6	10	0	0	0	July
Aug.	85.3	61.1	73.2	104	1947	37	1934	0	4.16	4.00	1943	0	0		0		6	10	0	0	0	Aug.
Sept.	76.7	52.3	64.5	104	1939	27	1949+	110	3.57	3.04	1931	0	0		0		6	3	0	*	0	Sept.
Oct.	64.7	41.3	53.0	91	1953	16	1935	390	2.14	1.52	1940	T	0.3	1952	0.3	1952	5	*	0	6	0	Oct.
Nov.	46.2	27.8	37.0	78	1933	- 8	1947+	840	2.13	2.17	1956	2.8	9.2	1959	4.5	1938	4	0	4	21	*	Nov.
Dec.	33.3	16.8	25.1	62	1951	-26	1950	1240	1.25	1.12	1940	6.9	17.9	1951	5.1	1959	3	0	13	29	4	Dec.
Year	59.7	38.0	48.9	109	July 1936+	-37	Jan. 1951	6810	32.82	5.46	July 1940	34.7	28.7	March 1951	10.0	March 1959+	64	30	51	149	19	Year

(a) Average length of record, years.

T Trace, an amount too small to measure.

** Base 65°F.--H. C. S. Thom, Monthly Weather Review, January 1954.

+ Also on earlier dates, months, or years.

* Less than one half.

CLIMATE OF PRAIRIE DU CHIEN, WISCONSIN

Prairie du Chien, county seat of Crawford County, is located on the flood plain of the Mississippi River just above the influx of the Wisconsin River in southwest Wisconsin. A short distance to the east of the city a ridge begins that extends more than 50 miles to Sparta. The area was originally covered with an oak forest with oak openings. Soils are mainly silt loams.

This summary is representative of Prairie du Chien and the river bottoms of the area. The climate of the hills and ridges is better represented by data from Viroqua.

The climate of Prairie du Chien is continental with seasons that vary considerably from year to year. Winters are relatively cold and snowy while summers are warm and, at times, oppressively hot and humid. Springs and falls are occasionally short with many rapid transitions. All seasons are associated with storms that accompany the changes in type of air mass.

During the period of this summary, the number of days in a year with temperatures 90 degrees or higher has ranged from 54 in 1931 to 7 in 1951; the number of days 0 degrees or below has ranged from 37 in 1936 to 2 in 1931.

Precipitation during the 5-month period May through September has approximated 60 per cent of the annual amount. The probability of 1 inch or more of rain in a 7-day period during the summer is greatest the first 2 weeks and last week of June when the chance is about 4 in 10 years. The probability of a 7-day dry period, trace or less, during the summer is greatest the last week of August when the chance is nearly 3 in 10 years. Intensities of about 1.45 inches in 1 hour, 2.50 inches in 6 hours, and 3.10 inches in 24 hours can be expected about once in two years. The greatest amount of rain in 24 hours was the 5.46 inches that fell July 26, 1940. The number of days in a year with 0.01 inches or more precipitation has been between 98 and 122 in two-thirds of the years with an average of 110 days.

Annual snowfall has varied from 79 inches in 1951 to 15 inches in 1958. The average date of the first 1 inch or greater snowfall is November 29. The chance of this snowfall by November 6 is 1 in 10 years, and by December 21 is 9 in 10 years.

Thunderstorms have occurred on an average of 42 days a year with individual years ranging from 60 to 23 days. Hail has fallen on an average of 3 days a year with extreme years of 7 and 0 days. Since 1916 three tornadoes have been confirmed in Crawford County.

Wind, sunshine, and relative humidity records are not available but the following data from LaCrosse should approximate conditions in Prairie du Chien.

Prevailing winds are from the northwest in winter and from southerly directions the remainder of the year. April is the windiest month with an average of 12 miles per hour and August is the least windy with an average of 7 miles per hour. The wind speed has averaged less than 4 miles per hour about 10 per cent, 4 to 12 miles per hour about 65 per cent, 13 to 31 miles per hour about 25 per cent, and greater than 31 miles per hour less than 1 per cent of the time. The highest speeds are usually from one of the westerly directions.

Possible sunshine has averaged about 40 per cent for November and December, 60 per cent and over from April through September, and from 50 to 60 per cent for the remaining months.

Relative humidity has approximated:

Threshold	Winter	Spring	Summer	Fall
Less than 50%	5%	20%	15%	15%
50% to 79%	60%	50%	45%	55%
Greater than 79%	35%	30%	40%	30%

The average date of the last 32-degree freeze in the spring is April 27, and the first in the fall is October 9. The growing season, defined as the number of days between the last 32-degree freeze in the spring and the first in the fall, averages 165 days. The following table gives the likelihood of critical temperatures occurring.

Temperatures	20%	40%	60%	80%
AFTER DATE IN SPRING				
32° or below	May 7	Apr. 30	Apr. 24	Apr. 17
28° or below	Apr. 26	Apr. 19	Apr. 13	Apr. 6
24° or below	Apr. 16	Apr. 8	Apr. 2	Mar. 25
20° or below	Apr. 6	Mar. 30	Mar. 23	Mar. 15
16° or below	Mar. 28	Mar. 20	Mar. 14	Mar. 6
BEFORE DATE IN FALL				
32° or below	Sept. 29	Oct. 6	Oct. 12	Oct. 19
28° or below	Oct. 10	Oct. 17	Oct. 24	Nov. 1
24° or below	Oct. 23	Oct. 31	Nov. 6	Nov. 14
20° or below	Oct. 28	Nov. 6	Nov. 12	Nov. 20
16° or below	Nov. 6	Nov. 14	Nov. 20	Nov. 28

Marvin W. Burley
Weather Bureau State Climatologist
Weather Bureau Office
Madison, Wisconsin

PRAIRIE DU CHIEN, WISCONSIN

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	11.8	32.6	36.3	51.2	60.4	68.9	75.6	73.8	65.2	49.6	40.1	25.3	49.2
1931	27.6	33.6	34.4	51.6	57.1	75.0	78.4	73.1	69.7	55.8	43.9	33.2	52.8
1932	25.3	27.6	27.0	48.8	61.9	71.4	74.2	72.6	61.0	48.8	32.9	22.2	47.8
1933	30.8	20.5	34.4	47.4	60.0	77.1	75.0	70.4	68.5	49.4	35.4	24.8	49.5
1934	26.4	20.7	33.2	48.7	68.0	74.7	75.6	69.2	60.8	55.2	41.9	20.0	49.5
1935	17.0	25.9	38.3	47.2	55.0	64.6	78.0	72.0	64.0	50.2	33.2	20.4	47.2
1936	9.6	4.0	36.0	44.0	65.7	67.8	79.4	75.0	65.1	47.8	33.5	25.2	46.1
1937	12.6	17.4	29.4	45.4	59.6	65.8	72.2	74.3	62.3	47.4	33.5	22.3	45.2
1938	21.0	30.0	43.0	51.0	60.6	69.2	75.6	75.5	65.8	57.4	38.2	25.9	51.1
1939	27.8	20.6	35.9	47.7	67.4	72.1	76.2	71.9	69.4	53.2	39.0	32.7	51.2
1940	11.4	24.6	29.8	47.8	58.9	71.8	76.0	70.8	65.1	55.9	34.2	26.8	47.8
1941	23.4	20.4	30.2	55.4	65.5	70.1	75.4	75.0	66.8	53.0	40.2	31.4	50.6
1942	20.2	23.8	38.0	54.4	58.6	69.0	73.5	72.0	61.8	51.6	37.9	19.5	48.4
1943	14.4	22.2	28.4	47.4	58.5	72.6	75.5	73.4	59.8	50.0	33.4	26.1	46.8
1944	28.8	27.2	30.7	45.9	64.7	72.0	72.3	73.9	66.1	53.0	42.0	21.2	49.8
1945	16.6	24.1	45.8	49.8	55.6	64.7	72.4	73.1	63.2	51.4	36.8	19.0	47.7
1946	23.9	26.8	45.4	54.5	58.8	70.4	75.0	70.0	63.6	56.8	38.8	28.9	51.1
1947	25.5	18.6	31.4	47.1	56.1	67.9	73.3	81.6	68.0	62.1	33.0	25.7	49.2
1948	16.2	21.7	33.3	55.0	59.6	69.5	76.1	74.9	68.3	51.6	40.4	25.9	49.4
1949	20.7	21.5	34.9	49.4	63.8	73.7	77.7	74.8	60.4	56.5	40.6	27.2	50.1
1950	21.2	21.7	29.3	43.1	61.2	69.5	70.9	69.1	63.8	57.6	33.8	17.1	46.5
1951	15.7	22.1	28.6	44.3	64.4	67.0	72.8	70.3	61.0	52.5	29.9	21.9	45.9
1952	21.3	30.0	31.8	49.8	60.4	73.1	77.3	71.4	64.4	46.5	39.5	27.1	49.4
1953	24.1	26.3	36.3	44.3	60.7	73.4	74.8	73.8	65.1	58.6	41.8	29.1	50.7
1954	20.2	35.7	33.6	52.4	55.9	73.8	76.6	72.2	66.0	51.8	40.3	26.5	50.4
1955	21.0	21.4	32.7	56.1	64.1	68.2	80.4	78.4	66.8	53.7	32.7	19.2	49.6
1956	19.3	21.8	31.4	46.9	61.2	73.5	71.7	72.9	61.5	58.3	37.2	27.6	48.6
1957	15.4	29.4	35.5	50.5	59.1	69.8	76.4	72.7	62.1	50.1	36.5	29.4	48.9
1958	22.8	18.2	34.3	50.0	61.9	65.7	71.9	72.6	65.2	55.1	40.2	17.8	48.0
1959	13.6	17.7	31.9	49.0	64.8	71.3	72.5	76.1	65.7	48.3	29.3	32.8	47.8

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	1.23	0.20	1.02	3.58	3.73	5.68	2.74	1.46	3.68	2.58	2.34	0.46	28.70
1931	0.49	0.40	1.53	2.29	2.07	3.04	0.80	3.77	9.10	1.26	4.44	1.52	30.71
1932	2.16	1.48	1.59	2.11	5.72	6.62	3.69	5.41	3.44	1.93	2.88	2.29	39.32
1933	0.58	0.92	3.65	2.56	6.45	1.25	4.54	1.57	2.68	2.05	0.30	1.14	27.69
1934	0.93	0.67	1.39	0.56	1.52	4.26	5.30	3.62	5.81	0.90	6.03	1.63	33.62
1935	1.42	1.18	1.82	2.33	3.60	5.57	1.44	4.50	0.99	2.13	3.27	0.66	28.91
1936	1.21	1.43	0.95	0.73	2.03	3.77	0.84	5.75	7.32	1.00	0.90	1.62	27.55
1937	2.47	1.49	0.94	2.37	3.23	4.79	1.03	1.61	2.97	3.93	1.71	0.83	27.37
1938	1.33	2.34	3.38	3.26	4.41	6.26	4.49	6.02	9.46	1.02	2.84	0.89	45.70
1939	1.06	1.28	0.90	1.61	3.46	2.65	3.90	2.94	1.98	1.82	1.13	0.32	23.05
1940	0.83	0.97	1.24	3.26	2.73	3.52	10.96	9.78	0.47	3.01	2.75	1.75	41.27
1941	1.32	0.45	2.29	2.27	6.68	3.63	2.57	0.35	7.09	5.08	2.31	1.40	35.44
1942	0.72	0.55	1.58	1.12	4.25	5.60	3.74	5.16	4.40	2.58	2.42	1.59	33.71
1943	1.01	0.56	2.60	1.31	3.37	6.84	4.05	10.00	3.65	2.09	1.50	0.91	37.89
1944	1.43	1.42	2.92	2.50	6.48	7.46	3.17	3.75	2.77	0.78	1.50	1.07	35.25
1945	0.86	1.69	3.15	4.31	4.36	5.83	2.53	4.26	3.42	0.29	3.79	1.44	35.93
1946	2.61	0.53	3.11	0.95	1.41	5.61	1.58	7.52	8.07	2.69	2.47	1.06	37.61
1947	1.03	0.19	1.32	4.92	4.47	8.68	2.81	1.88	4.59	3.76	2.15	1.29	37.09
1948	0.12	2.04	2.84	2.57	3.20	3.35	1.34	2.39	2.01	2.29	2.39	1.51	26.05
1949	2.55	0.62	2.13	1.70	2.23	7.29	3.26	0.68	1.69	0.90	0.64	1.59	25.28
1950	1.69	1.64	2.10	4.02	5.46	6.51	9.09	3.33	3.73	0.54	0.61	2.01	40.73
1951	0.97	1.97	5.58	5.18	3.61	4.42	5.05	7.83	1.73	4.52	1.82	1.00	43.68
1952	1.98	0.57	2.49	1.87	4.41	3.37	3.05	3.00	1.16	0.07	2.37	1.85	26.19
1953	0.64	1.93	2.58	4.16	2.04	4.26	5.98	3.19	0.94	0.30	1.15	1.98	29.15
1954	0.40	0.41	1.38	5.58	5.10	8.72	2.99	3.02	3.23	4.19	0.47	0.93	36.42
1955	0.63	0.90	1.18	4.26	3.22	4.48	3.32	0.80	1.35	2.73	0.50	0.81	24.18
1956	0.57	0.51	2.20	3.72	4.38	3.27	5.70	4.36	1.75	2.65	2.85	0.48	32.44
1957	0.23	0.21	0.86	2.62	5.60	5.03	5.91	3.21	2.74	2.24	2.77	0.96	32.38
1958	0.34	0.02	0.55	3.07	0.61	3.46	1.82	5.06	1.69	1.64	1.34	0.34	19.94
1959	1.07	1.88	3.06	1.82	5.85	5.95	2.94	8.58	3.26	3.20	2.14	2.07	41.82

STATION HISTORY

The first climatological observations in the area were taken at Fort Crawford by the Assistant Surgeon. Temperature readings were made from January, 1822 through August, 1845. Precipitation measurements were made from May 1836 through August, 1845.

A second series of climatological observations began with the opening of a station January 1, 1891. The station has been moved several times; all exposures have been over sod and near the Mississippi River. The present location is 0.8 miles west-northwest of the post office.

Observers have been:

Frank Cornelius..... Jan. 1, 1891 to Oct. 30, 1895
Eugene C. Amann..... Nov. 1, 1895 to Dec. 31, 1898
John DuCharme..... Jan 1, 1899 to Nov. 30, 1909
J. A. Gillis..... Dec. 1, 1910 to May 31, 1944
Ben F. Shaub..... June 1, 1944 to present